

62

LIVINGSTON'S

Quality

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SEEDS



FIELD AND LABORATORY TESTED SEEDS



A DESCRIPTIVE LIST
OF VEGETABLE SEEDS

[1963]

THE LIVINGSTON SEED COMPANY

COLUMBUS 16, OHIO

*Famous for Quality Seeds
Since 1850*

Price 10c

LIVINGSTON'S

Descriptive List of Vegetable Seeds

FOREWORD

Since 1850 the term Livingston's Garden Seeds has meant something to the discriminating planter and grower. During this century of service to the public, both in this country and abroad, Livingston's seeds have built up a priceless reputation. They have become synonymous with terms: "dependability," "trueness of type," "vigorous growth," "honest germination" and "purity of strain."

Our policy now is truly a continuation of that policy which has been religiously followed by The Livingston Seed Co. this last century, to give to the public the very best seed that is possible. To that end, this descriptive catalogue is your guide in helping you select those varieties that are best suited to your locality, to your soil, and to your climate, realizing always that these factors play a vital part in the final harvest of any planting. Measurements of size, weight, shades of color and even lengths of maturity are variable and only approximate.

To our thousands of satisfied customers who have bought Livingston's seeds over the years our heartfelt thanks and to our many new friends our pledge of continued honesty and fairness.

THE LIVINGSTON SEED CO.

COLUMBUS 16, OHIO

The Livingston Seed Company warrants to the extent of the purchase price that seeds sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.

Broccoli

Culture—Sow the seed $\frac{1}{2}$ inch deep in the same manner as for late cabbage, in May, and transplant in June or July, in very rich soil about $2\frac{1}{2}$ by $1\frac{1}{2}$ feet apart.

One ounce of seed will sow 100 feet of row. About 2500 plants to an ounce.

★ **Italian Green Sprouting.** It forms a large head consisting of a cluster of bluish green flower-heads. When this central head is removed the plant develops numerous lateral sprouts, each of which produces a small head. These are cut, leaving about 6 inches of the stem, and are tied in bunches for market. Both stems and heads are cooked and served like cauliflower. 80 days.

Brussels Sprouts

Culture—Start seed the same as Cabbage and transplant outside in rows 24 to 30 inches apart, placing plants about 18 inches apart in the row. Cultivate same as Cabbage. Can also sow seed in drills, $\frac{1}{2}$ inch deep, outside in May and transplant.

One ounce of seed will sow 200 feet of drill.

Long Island Improved. Hardy, dwarf variety developing heads along the stem. These heads mature in succession from the base of the plant upward and should be harvested accordingly. 90 days.

Table Beets

Culture—The soil best suited for the culture of the Beet is that which is rather light, well fertilized. If wanted very early, sow in hotbeds and transplant; but for main crop sow in April, as soon as the ground becomes fit to work, in drills $1\frac{1}{2}$ feet apart, $\frac{1}{2}$ inch deep. For succession later sowings can be made up to August. For winter use, the turnip varieties may be sown as late as June and the seed covered 2 inches. When the plants are 3 to 4 inches in height, thin out so that they stand 2 to 3 inches apart. Keep free from weeds by frequent hoeing and hand-weeding if necessary. Before freezing weather sets in the roots may be stored in cellars or pits same as potatoes. Dry earth thrown over them before the straw is put on insures their keeping over winter.

One ounce will sow 50 feet, 5 to 6 pounds to an acre.

Table Beets (continued)

Detroit Dark Red. One of the most popular red Turnip Beets for market gardeners and canners. Its small top, early maturity and splendid shape and color have made it a favorite. Top small, upright growing root globular and very smooth color of skin, dark red; flesh bright red, zones with a darker shade. 50 days.

Early Wonder. (Asgrow Type.) A turnip shaped variety selected from Crosby's Egyptian but slightly smaller, very uniform and always smooth. Flesh red and of excellent quality; tops are small and erect; therefore it may be planted closer than most other varieties. 60 days.

Mangel-Wurzel Varieties

Culture—Sow from April to July in rows 15 to 18 inches apart as soon as the ground can be thoroughly worked. Cover seed about 1 inch, making ground firm over the seed. When 4 inches high, thin to 8 inches apart.

Mammoth Long Red (Jumbo Mangel, Colossal, etc.). Large, well-formed, dark red. Big cropper, yielding 30 to 50 tons per acre; dairymen's favorite.

Beans

Green-Podded Dwarf

Culture—Dwarf Beans should be planted in rows 2½ feet apart with 3 or 4 beans in a hill about 10 inches apart in the row. If drilled, they should be placed 3 to 4 inches apart. Cover with 1 inch of soil and press down firmly to aid in germination. For a continuous supply, plant about May 15th and every ten days until August. Do not cultivate deep after blossoms appear and never cultivate or handle when the vines are wet. Pick frequently to insure longer bearing.

One pound will plant a row 100 feet long; 60 to 100 lbs. to an acre.

Black Valentine Stringless. One of favorites for fresh market. 16" to 18" tall—vigorous and erect. Pods 6½"-7" long—slender, thick oval. High fiber content, stringless. Seed oval, slightly flat, jet black. 52 days.

★ **Bountiful.** Best flat-podded or semi-round variety—valuable for early shipping. Light green, straight, stringless pod, 6 to 7 inches long. A hardy, productive early sort, bearing a long time. 48 days.

Commodore. (Dwarf Kentucky Wonder.) Grows 15 to 17 inches tall. Pods 7½ to 8½ inches long. Round and stringless and of the finest flavor. Pod characteristics resembles Kentucky Wonder. 58 days.

Beans — Green-Podded Dwarf (continued)

Gardengreen. All American Bronze Medal winner. Outstanding for its ability to produce a high yield of straight, round, bright dark green pods, which hold over a long period of time, excellent flavor and freedom from fiber. Bush type, 18 inches tall, pods 5 to 5½ inches long. Resistance to common bean mosaic. 58 days.

★ **Giant Stringless Green-Pod.** Pods 5 inches long, round, fleshy, extremely crisp, and absolutely stringless. Early and prolific; fine for canning. 56 days.

Pearlgreen. Productive white seeded variety in Tendergreen class. Round, fleshy, medium green, straight pods on upright plants. Being white seeded, the dry beans can be saved and used for edible purposes 56 days.

★ **Stringless Green-Pods.** (Landreth.) Produces medium long, straight, round, saddle-backed pods which are stringless at all stages. For best results plant in rich soil. Very productive. One of the best general purpose varieties. 50 days.

Sulphur. Adapted to south for early market. Vine 16 to 17 inches tall, vigorous and spreading. Hardy and highly productive. Pods 4½ to 5 inches long, plump and slightly curved, stringy and almost fiberless. 54 days.

Tendercrop (Stringless). Introduced in 1958 by the USDA Plant Industry Station. Parentage is Topcrop by Tenderpod. Outstanding for its tall, vigorous plants, concentrated set, high yields, and very attractive pods of excellent quality. Shows practical immunity to common bean mosaic and pod mottle virus. 16"-18" tall, heavy concentration of pod set on the outside and upper part of the plant makes it well adapted to mechanical picking. Pods 5½"-6" long, straight and slender and smooth. Purple mottled seed. 55 days.

★ **Tendergreen Impr. M.R.** Gold Medal, A.A.S., 1933. New, tender, fine-flavored, early, dwarf-Bean. The pods are long, round, very meaty, of a light green color, and entirely stringless. Vines very vigorous and productive. 53 days.

Tennessee Green-Pod. A large, flat-podded variety, having strings, but of good quantity. Hardy and productive. 49 days.

★ **Top Crop M.R.** All American Gold Medal winner. Cross between Full Measure and Refugee. Outstanding for the home gardener, market, or commercial grower. Plant is rugged and strong. Pods 5 to 6 inches long, round, and straight. Very meaty and tender. Will hold this stage after pod has developed to large size. 51 days.

Dry Shell Beans

Dwarf Horticultural (Roman). Excellent for green shell use or snaps. Pods 5½ to 6 inches long. Dark green, flat, and stringless at snap stage. At green shell stage, greenish-yellow splashed with red. Plant thrifty and productive. Seed oval, spotted and splashed with red. 65 days.

★ Denotes varieties suitable for freezing.

Beans — Dry Shell Beans (continued)

Red Kidney, Dark. Standard commercial variety. Pods flattened, oval, tough and not edible. Plant erect, bushing, and very prolific. Seed, deep mahogany, kidney shape. 100 days.

White Kidney. A high quality bean for dry use. Pods flat, straight and non-edible. Plant erect, hardy, very productive. Seed, large white kidney shape. 100 days.

Wax-Podded Dwarf Varieties

★ **Brittle Wax.** Pods 6 to 6½ inches long. Excellent quality, stringless and fiberless, round, slightly curved, brittle, fleshy, light yellow in color. 54 days.

★ **Pencil-Pod Black Wax.** An improvement over the old strain. Pods are round, 6 to 7 inches long, stringless. Plants vigorous and productive. Good quality. 54 days.

★ **Top Notch Golden Wax.** Flat, 5 inch pods, clear golden yellow, fleshy and stringless; very productive. An excellent home garden sort. 50 days.

Pole or Running Beans

Culture—The Pole or Running Varieties are tender and should be sown a week later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart; plant three to six Beans in a hill, 1 inch deep; leaving space in center for the pole. When well started, thin to from 2 to 4 plants in the hill.

Two pounds will make 100 to 200 hills, according to size of Beans.

Genuine Cornfield (Impr. Striped Creaseback.) Vine strong and prolific. Pods nearly round, straight, medium green at picking stage, purple-mottled later, fleshy, tender, somewhat stringy. Seed, oval, tan with irregular brown mottling and striped. 90 days.

★ **Kentucky Wonder or Old Homestead.** Old favorite. Long, fleshy, deeply saddle-backed green pods. Very prolific, producing fine, crisp Beans until late in the season. Slightly stringy, but of best quality. 65 days.

King Horticulture Mam. (supersedes London Hort.) New variety noted for earliness and enormous yield. Pods are strong, straight and entirely stringless; beans are exceptionally large. Will command attractive prices on market. 70 days.

Logan Giant. Light green podded snap beans of finest quality. 6 to 7 inch pod, broad, round and slightly curved, produced in clusters. 80 days.

Beans — Pole or Running Beans (continued)

McCaslan Pole. Excellent market variety for snap and dry shell beans. Pods 8 inches long, flat, medium green; almost stringless. Similar to Kentucky Wonder except seeds are white. 65 days.

Missouri Wonder (Nancy Davis.) Vigorous productive variety; pods round, fleshy, 8 inches long, of good quality; fine for home garden or market, usually grown in corn. 65 days.

Mountaineer (Half Runner). A selection from white half runners of numerous strains by Comeli Seed Co. and University of W. Va. Plant, vigorous and leafy, medium long runners. Pods 4" long and $\frac{3}{8}$ " wide, oval to almost round. Stringy, but fiberless at all edible stages. Seed oblong with round to oval cross-section. 56 days.

White Half Runner. Very prolific; light green, $5\frac{1}{2}$ inch pods containing 5 to 8 beans. Stringless when young and excellent as dry shell bean. 20 inches tall with short runners. 60 days.

White Seeded Kentucky Wonder 191. High yielding type of Ky. Wonder, white seed. Round pod, stringless at early stage. Good for dry shelled as well as snap beans. 64 days.

Bush Lima Varieties

Culture—Limas are tender and must be planted after all danger of frost is over. (Not before May 15.) Make rows 2 to 3 feet apart and plant beans on edge with eyes down. Bush limas should be placed every 3 to 4 inches apart in the row; pole limas, 24 to 36 inches apart, placing 2 to 3 beans in each hill. Cover to depth of 2 inches. Cultivate well, only when they are dry and up until blossoms appear.

One pound will plant 100 foot row; 60 to 90 pounds to acre.

Burpee's Improved. Larger pods than the original Burpee's Bush Lima. Beans are thicker, and remain green even in the dry stage. The plants are very prolific, bearing pods in clusters of from five to seven. The individual pods average 5 inches long and contain up to six beans which are thin-skinned and of delightful flavor. 75 days.

★ **Fordhook 242** (Supersedes Fordhook Regular.) New All America variety. Outyields standard Fordhook. Pods slightly smaller; plants larger and more vigorous. Produces better crops in hot dry weather than Fordhook and holds uniform size and shape throughout season. 75 days.

★ **Henderson's.** Baby Lima; heavy and sure cropper; best flavored for dry winter use. Plants, 18 inches tall. 65 days. A popular commercial canning sort.

★ Denotes varieties suitable for freezing.

Pole Lima Varieties

One pound will plant 150 hills, 30 to 45 pounds to an acre.

King of the Garden or Large White Pole. Vigorous grower, pods containing five to six large, white, flat Beans, which are of fine quality. The vines grow strong and yield heavily. 88 days.

Carrots

Culture—Sow in early spring as soon as the ground can be worked, in drills 15 to 18 inches apart, finally thinning the plants to 2 to 3 inches apart. Do not allow growth to be checked; water, if necessary. If sown early on moist soil, a half-inch is deep enough to cover the seed. The seed is slow to germinate. Keep clean by frequent hoeing and weeding. If neglected, the young plants are easily smothered, and the crop lost. Successive sowings can be made up to July.

One ounce sows 100 foot row, 4 pounds to an acre.

★ **Chantenay.** An improved strain of Chantenay which is about an inch longer than the original, being about 7 inches. Tops medium size, neck small. The root tapers slightly and is decidedly stump-rooted. Color is deep orange red; flesh is fine grained, crisp and tender and of splendid quality. A heavy cropper. 69 days.

Imperator. Award of Merit, All-American Selections, 1933. Bred for market and shipping; a fine buncher. 7 to 8 inches long, sloping shoulders and semi-blunt end. Rich orange color with indistinct core. 77 days.

Danvers Half-long. The best for general crop as it will yield the most per acre. Tops medium size; roots orange, large, but of medium length, tapering uniformly to a blunt point. 75 days.

Improved Long Orange. Deep orange color, good flavor; requires a deep light soil. 10-12 inches long, tapered, pointed. 80 days.

Nantes Half-long (Touchon.) An improved Nantes, being slim and coreless with longer root but not so strong a top but sufficiently strong for bunching. A good basket carrot. Satisfactory on muck. 70 days.

Cauliflower

Culture—Cauliflower delights in a rich, moist soil. Sow the seed in the hotbed in February or March and transplant the plants 2 to 3 inches apart in boxes, or in another hotbed, until such time as they may safely be planted in the open ground. For fall crop, sow seed in June. Set the plants in the field 30 inches by 18 inches apart. When heading tie the outside leaves loosely over the head to protect it from the sun.

One ounce produces 3000 plants, 6 to 8 ounces to an acre.

★ **Early Snowball (Snowdrift.)** One of the best for market purposes. Profitable to force under glass, and does well for late planting. It is a sure header. 55 days from trans.

Cabbage

Culture—Cabbage does best in rich, mellow, well fertilized soil. For early, sow seed inside in a box or in hot-bed in late February or early March. Transplant into other boxes later and harden off by gradual exposure outside. Transplant outside in April, in rows 2 feet apart and 1½ feet in the row. Set plants down to the first leaf and do not cover the heart with soil. Cultivate often and deeply. For later Cabbage, sow seed outside in May and transplant in about four weeks. Maturities given are from date of transplanting.

One ounce produces 2500 plants, 4 ounces to an acre.

Early Varieties

Copenhagen Market. Early, large, round-headed strain averaging 5 to 8 pounds in weight. The compact growth of the plant, the solidity of the head, its excellent flavor, and extreme earliness make it one of the most popular. 66 days.

Early Dwarf Flat Dutch. Excellent second-early variety, producing fine large heads. Highly valued for its fine quality and ability to resist heat. Heads very solid, broad, round, flattened on top, tender and fine-grained. 90 days.

Early Jersey Wakefield. Good early variety. Pyramidal in shape, with blunted peak; very sweet. Large heads for an early sort. 62 days.

Golden Acre. Earliest Standard Strain. Round, firm, uniform, medium sized heads with small outer leaves, permitting closer planting than ordinary; stands a long time without bursting. 66 days.

Marion Market. (Copenhagen Yellows-resistant.) Same type as Copenhagen. If you are unable to grow a satisfactory crop because of this disease, we recommend this variety. 69 days.

Resistant Detroit YR (Golden Acre YR.) A yellows-resistant strain of Golden Acre. Same type and habits. From plants 68 days.

Wisconsin All-Season YR. Heads very large, round, solid and of fine quality, keeping as well as the winter sorts. Remarkable for its ability to stand hot sun and dry weather. Does not head up all at once. 76 days.

Late Varieties Cabbage

Danish Ballhead Short-Stem. (Hollander, Dutch Winter.) Most popular of all the late ballhead types. Well-known for its solidity, being very compact with medium core, weight and superb keeping qualities. Fine for storage. Will be appreciated by those who ship and sell by weight. 83 days.

★ Denotes varieties suitable for freezing.

Cabbage — Late Varieties (continued)

Premium Flat Dutch. The main crop, late variety. Because of its solidity and compact manner of growth it is a heavy yielder. The heads are large, white, crisp, tender, and sure to head. Grown largely for late market and kraut-making. 85 days.

Wisconsin Hollander No. 8 YR. A strain of Danish Ballhead. Originated where "Yellows" is very prevalent. 91 days.

Savoy Cabbage

Chieftain. Awards of Merit, A.A.S., 1938. Early variety with crisp, large, firm heads; good quality; long standing habit.

Red Cabbage

Mammoth Rock Red. Large heads, deep red to center. 84 days.

Chinese Cabbage

Also known as "Celery Cabbage," "Odorless Cabbage," "Chinese Lettuce," etc.

Culture—Fine crop for muck land. Cannot be grown successfully as a spring crop as it bolts to seed, neither can it be transplanted well. Sow seed $\frac{1}{2}$ inch deep in July, in rows $2\frac{1}{2}$ feet apart and thin to stand 12 inches apart in the row. Use care in cultivating.

Michili (Chihili.) A sure heading strain of the Chihili type. Foliage, dark green; heads 4 inches thick. 18 to 20 inches tall, tapered near tip. 75 days.

Sweet Corn

Culture—The Sweet or Sugar Corn varieties, being liable to rot in cold or wet ground should not be planted until May or when the soil has become warm and dry. For a full supply for the table during the entire season, plant every ten days or two weeks until the last week in July, in hills 2 by 3 feet apart for the early kinds, and 3 by 3 feet for the large late sorts, using four or five grains to the hill. Give frequent and thorough cultivation all the season. A pound of Sweet Corn contains about 2,000 grains.

One pound will plant 200 hills, 12 to 16 pounds to an acre.

Standard White Varieties

Aunt Mary. Said to be the oldest and sweetest corn in the world, yet entirely new to today's grower. Most excellent quality, having unusually high sugar and starch content. Stalks regularly bear two ears, 7 to $8\frac{1}{2}$ inches long and 8 to 10 rowed. Pure white, deep kernels. Highly recommended to market; home and roadside gardeners. 90 days.

Country Gentleman. One of the richest flavored of all late varieties. Pearly white kernels, placed irregularly. Ears average 7 inches long by 2 inches in diameter. 92 days. A favorite canning sort.

Sweet Corn — Standard White Varieties (continued)

Early Evergreen (Supersedes Whipples Ea. White.) Ears are about 7 inches long with 16 to 18 rows. 87 days.

★ **Stowell's Evergreen.** Considered by many the best late variety. Favorite with canners and market gardeners for late use. Ears are 8 to 9 inches long with 14 to 18 rows of deep kernels. 90 days. Remains in good table condition a long time.

Standard Yellow Varieties Sweet Corn

Golden Bantam 8 Row. Standard for high quality. 6 inch, 8 rowed, well filled ears. 78 days. Kernels rich golden yellow, tender and sweet.

★ **Improved Golden Bantam 12 Row.** A development from Golden Bantam, but with ears from 6 to 6½ in. long, having from 12 to 14 rows of tender, sweet, golden corn. Has a longer tender stage than regular Golden Bantam. 80-82 days.

Yellow Hybrids

★ **Early Sunglow.** New Yellow Hybrid of high quality. Fine for home den and market. It is outstanding for its early vigor under cold conditions. Two ears per stalk and ears snap easily. The ear is 6-7 inches long with slight taper and mostly 12 rows. Very uniform and free of open rowing. Excellent flavor and unsurpassed in tenderness. Holds edible stage for a long time. 60 days.

Golden Challenger. A corn that will come into roasting ears some three days ahead of Golden Cross and has the characteristics of holding its tender edible stage for several days longer than other corn. The elite of all table corn we think. Matures in approximately 80 days.

★ **Golden Cross Bantam.** Sturdy stalks and broad leaves; withstands adverse conditions. Ears are 8 inches long and 10 to 14 rowed. Out-yields other commercial varieties and matures all at the same time. 80 days.

★ **Golden Beauty.** 68 days. Quality outstanding for an early corn. Heavy yield of fine ears, good wilt resistance. Ears slender and attractive. The first rival to North Star.

Golden Hummer. The largest, earliest, high quality hybrid strain. Ears 6½ to 7 inches long; 12 rowed; kernels golden yellow, deep, broad, containing a high sugar content. Very productive and very uniform. One of the best hybrids for the early, profitable market. 64 days.

Gold Rush (Corneli). A remarkable early yellow Hybrid. Ears 8½ inches long, 12 to 14 rowed, filled clear to tip with tight husk. Succulent and sweet. Mostly two ears to stalk. 70 days.

★ Denotes varieties suitable for freezing.

Sweet Corn — Yellow Hybrids (continued)

★ **Improved Carmel Cross.** A Hybrid of the Marcross type but 3 to 4 days later in maturity. The stalks resemble Marcross in size and vigor. Ears $7\frac{1}{2}$ to 8 inches long, well filled with 12 to 14 rows of deep yellow kernels; an ideal variety to come between Marcross and Golden Cross Bantam. 70 days.

Ioana. A cross originated at Iowa State College. Productive and highly resistant to wilt. Tall plants with broad leaves. Ears are $7\frac{1}{2}$ to 8 inches long with 12 to 14 rows of medium-narrow light yellow kernels of excellent flavor. Has proven more resistant to adverse conditions than Golden Cross Bantam. 85 days.

Iochief. Gold medal winner. Stalks 7 to $7\frac{1}{2}$ ft. Ears $8\frac{1}{2}$ to 9 in. long with 16 to 18 rows of very deep narrow kernels of good flavor and tenderness. Maturity 83 days.

Marcross C-6-13. A popular early Hybrid. Ears 7 to 8 inches long. 10 to 14 rows of kernels which are medium yellow in color and of good quality. A very desirable variety for an early yellow. Grows 5 to 6 feet high. Matures in approximately 74 days.

Ohio Gold. 84 days. Developed by Ohio State University. Excellent quality; finest flavor. Ears 7 to $7\frac{1}{2}$ inches long with 12 to 14 rows of medium yellow deep kernels. Outyields most other varieties.

★ **Seneca Chief.** A tall vigorous grower producing two long slender nine inch ears per plant. Extra small cob with deep and narrow kernels, tender. Ideal for freezing or canning. 85 days.

★ **Tendermost.** Fine yellow hybrid variety. Tender superior flavor. Ears plump, well-filled tips. 14-16 rows of kernels, 9 in. ear length — 7-8 ft. stalk height, freezer type. 80-85 days.

White Hybrids

Country Gentlemen Hybrid. Plants $6\frac{1}{2}$ to 7 feet tall. Ears 8 inches in length; well filled with a zigzag pattern of very delicious deep narrow, ivory kernels. 98 days.

★ **Stowells Evergreen Hybrid.** Ears $7\frac{1}{2}$ to $8\frac{1}{2}$ inches long, with 14 to 18 rows of deep narrow kernels, which are tender and sweet; recommended for home or market garden and canning. Differs from open pollinated Stowells Evergreen in having a smaller ear, narrower and deeper kernels, and greater uniformity of maturity. 86 days.

Pop Corn

Purdue Hybrid 31. One of the heaviest producing corns, and one of the best for popping, as far as volume of popped corn. 110 days.

South American. A popular, widely adopted variety where the season is long enough for its maturity. The kernels are large, dark yellow, smooth. Ears 7 to 7½ inches long with 12 to 16 straight rows. Very productive, high yield of shell corn per acre. When popped, it has a creamy appearance and expands to exceptional large size. 100 days.

White Rice. A white pointed kernelled type, producing long, slender, 10 to 16 rowed ears. Ears about 6 inches in length. An old variety but a very good one. Popped corn is white and of good quality. 90 days.

Celery

Culture—Sow the seed in a hotbed or coldframe, or in the open ground, as soon as fit to work in the spring. Prepare the soil well before sowing, also keep quite moist until the seed germinates. Cut back to within 2 inches of the crown when 4 inches high. Transplanting of the early sorts should be done about June 15 and from that on to August 15, for the late varieties. Set plants in a single row, 6 inches apart, giving them a good watering. The rows should be 3 feet apart where boards are to be used for blanching, or 4 feet apart where soil is used.

One ounce produces 4000 plants, 10 to 12 ounces to an acre.

Giant Pascal. Local market money maker. Very desirable, long keeping green winter variety. Hearts blanch to golden yellow and stalks to pearly white; crisp, solid and free from strings. 140 days.

Golden Self-Blanching. Tall and Dwarf. Of French origin. Heavy, compact plants that grow to good size. Very tender and crisp; of excellent quality and beautiful golden color. The tall strain will be ready for market some days before the dwarf.

Cucumber

Culture—As soon as the weather has become settled and warm (about May 15), plant in hills 4 to 6 feet apart each way, with 8 to 10 seeds in a hill; cover ½ inch deep, smoothing the hill off with the hoe. Later, thin 3 to 4 plants to a hill. For pickles, plant from June 1 to August 1. The fruit should be gathered when large enough for pickling, whether required for use or not; if left to ripen on the vines, it destroys their productiveness.

One ounce plants 50 hills, 2 to 3 pounds to an acre.

Cucumber (continued)

Early Fortune (Supersedes Impr. White Spine.) Quite long, averaging about 9 inches in length, slightly tapering; vines very strong growing, disease resistant and productive. Popular both as a slicer and for pickles. A good shipper. 66 to 70 days.

Early Green Cluster. Small, short prickly pickles, borne in clusters of two and three. Fine for bottling. 53 days.

Boston Pickling. Uniform short, blunt ended, green variety, seldom too large for pickling; immensely productive. 53 days.

Improved Long Green. Fruits average 8 to 10 inches long; color, dark green; has few seeds. Vines are very strong growing and productive. Fine for slicing. A most popular home garden sort. 72 days.

Marketer, Long (Supersedes A & C.) A new variety producing very dark green cylindrical fruits, slightly tapered at ends. 7½ to 8 inches long. Vines prolific and vigorous white spined. 70 days.

Ohio MR No. 17 (Supersedes Chicago, Nat'l and Evergreen Pickling.) 56 days. Yields well with National Pickling. Vine is vigorous and of a healthy dark green color. Fruit 6¼ inches long and 2½ inches in diameter. Black spined and dark green.

Sensation Hybrid F-1. A new development of the Hybrid Cucumber. Fruit, long, slim, straight and dark green. Very uniform and holding its color well. Will go ahead of all other varieties for productiveness. Quality, excellent both for slicing and canning. Outstanding. 60 days.

Straight "8." Gold Medal, All-American Selections, 1935. Quite straight, regularly 8 inches long and about 2 inches in diameter; rounded at ends, nearly ideal dark green and almost devoid of objectionable stripings and pale tips. Vines are vigorous and productive. 70 days.

Collards

One ounce produces 2500 plants; culture same as Cabbage.

True Southern or Georgia. Endures heat. A non-heading type with loose cabbage-like leaves. Excellent for greens. 60 days.

Dill

Culture—Sow in April or May, thinly in rows about 1½ feet apart. Cover seed about ½ inch. Dill is used in large quantities for flavoring cucumber pickles and vinegar.

One ounce will sow 100 feet of row.

Mammoth. Largely used for flavoring.

Eggplant

Culture—Sow seed ¼ to ½ inch deep in hotbed or window box in late March. Temperature should be about 75 degrees. When large enough to handle, transplant to other boxes; keep covered and warm, and occasionally water. Harden plants by gradual exposure to sun and air. Transplant outside in late May or June, into warm, rich soil, 2 to 3 feet apart each way. When about a foot high draw earth up to the stem.

One ounce will produce 1500 plants, 5 to 6 ozs. to an acre.

Black Beauty. 80 days. Earlier than the purple varieties, and therefore adapted to northern sections. Fruits rich, lustrous, purplish black, very attractive in appearance and entirely spineless, holding its color a long time after picking. Plants remarkably healthy and very productive, tall and erect.

Endive

Culture—For an early crop, sow in April in rows 15 inches apart, cover ½ inch, and later thin the plants to stand 1 foot apart in the row. The main sowings are made in June and July. When nearly full grown, gather up the leaves and tie them by their tips to blanch the heart. Tie a few at a time as needed.

One ounce sows 150 feet of row, 3 to 4 pounds to an acre.

Fine Green Curled, Green Ribbed. Smaller plant and more finely cut than Large Green Curled. 80 days.

Full Heart Batavian. New, earlier strain of broad leaved, producing twice as many leaves as the old type. Large head with full heart blanching to light yellow. Leaves large, thick, and slightly wrinkled. 90 days.

Large Green Curled, Pink Ribbed. Hardy, vigorous growing; bright deep green leaves. Stands hot weather better than Green Ribbed and produces a full golden heart. Colored rib disappears when blanched. 85 days.

Kale or Borecole

Culture—Sow $\frac{1}{2}$ inch deep about the middle of April, but can be sown as late as July. For wintering over, sow in late August. Thin or transplant and cultivate like cabbage. Does not form heads, but furnishes abundance of curled leaves. Will endure considerable frost without injury.

One ounce sows 200 feet of drill, 1 to 2 lbs. to an acre.

Dwarf Blue Vates. Dwarf, spreading type with large, bluish-green leaves which are finely curled and of excellent quality. Hardy. 55 days.

Dwarf Green Curled Scotch. Dwarf and spreading. The leaves are beautifully curled and of a bright green color. Not as hardy as Blue Scotch. 60 days.

Long-Standing Siberian. Slightly darker green and more curled than Siberian. Will stand from a week to ten days longer before shooting to seed in the spring. 60 days.

Kohlrabi

Culture—Sow in hotbed in March and transplant in April or May, or sow outside in April or May. Make rows 18 inches apart, cover seed $\frac{1}{2}$ inch and thin to stand 6 inches apart in the row. The bulb above the ground is the edible part. Fine for table when young; good for stock feeding when mature.

One ounce sows 300 feet of row, 3 to 4 pounds to an acre.

Early Purple Vienna. 60 days. Very early, desirable sort. Plant small with purple leaves and stems. Bulbs globe shaped, purple in color, flesh white and of fine flavor.

Early White Vienna. 55 days. The most popular variety for forcing, home or market. Plant small, short leaves and stems, green in color. Bulbs globe shaped, light green in color, flesh white, tender and of fine flavor.

Lettuce

Heading Varieties

Culture—Head Lettuce requires a longer growing season than leaf lettuce but must reach maturity before hot weather and while the nights are relatively cool. Therefore, the secret of growing it is an extra-early start, quick and uninterrupted growth. This requires diligent cultivation and a constant and fairly high moisture content in the soil. It is best to start seed inside or in hotbed in March and transplant later in rows 15 inches apart. Plants should be 12 inches apart in the row. Seed can also be sown outside in early spring or late summer.

Maturities given are from transplanting date.

Lettuce — Heading Varieties (continued)

Bibb. 57 days. There seems to be unanimous agreement that the tenderest, most brittle of all lettuce leaves are found in the loose, dark green heads of this variety which chefs of luxury hotels and high priced food shops all over the country have begun to feature. In the garden it grows fast in the spring and fall, maturing its loose heads, as big as a fist, from seed sown in the open ground, with reasonable thinning. In hot weather it runs quickly to seed, so start it early and sow in a fall crop in midsummer.

Great Lakes. (Premier.) 60 days. A tight heading variety of the commercial New York type bred to produce mature heads in the hot summer weather of the middle west. It is slow to run to seed but needs fertile soil, and ample spacing in the garden row.

Iceberg. Beautiful large, curly leaves of light green, with a slight red tinge at the edges. Heads solid, crisp, tender, and of fine flavor. Do not confuse with Wonderful; they are entirely different. 50 days.

Crisp-as-Ice. Introduced by us in 1895. The large, solid heads deserve their name as they are exceedingly crisp, tender and brittle. Beautifully crimped and curled with outer leaves variegated dark brown, bronze and green; heart, creamy-yellow. Quite hardy. 50 days.

Leaf or Loose Headed Varieties

Culture—To grow good Leaf Lettuce outside sow the seed very thinly ($\frac{1}{4}$ inch) in rows 15 inches apart, covering with very fine soil. This can be done in April as soon as the cold wet days of spring are past. Successive sowings can be made at 2 week intervals for a continuous supply. Diligent hoeing, especially in dry weather and plenty of water are essential. Thin plants to 2 inches apart when a few leaves appear and normal use will further thin the row as they develop. For fall crop sow seed in August. For extra-early crop sow in cold-frame in fall and protect through the winter or in hot-bed in early spring and set out when soil is dry and warm.

One ounce of seed sows 100 square feet; plants 120 feet of row;
produces 3000 plants.

Black-Seeded Simpson. Very popular among market gardeners, and fine for the home table. Forms a large, loose head of light green, curly leaves that are large, thin, very tender, and of good quality. Early and can be grown easily. 45 days.

Grand Rapids New Tip-Burn Resistant. A new strain of Grand Rapids that is resistant to tip burning. A heading variety that gives greater weight per square foot due to compactness and does not become spindly or bolt to seed as quickly as others. Excellent for greenhouse growing but equally as good outside. Developed by the Ohio Agricultural Experiment Station. 45 days.

Oak Leaf. This excellent old variety has again become the most popular leaf lettuce for home gardens from coast to coast. The rich dark green of its leaves, its tenderness, and resistance to hot weather, are all outstanding. We consider it one of the best of the leaf type for home gardens. 40 days.

★ Denotes varieties suitable for freezing.

Lettuce — Leaf or Loose Headed Varieties (continued)

Prize Head. Heads are large, light green tinged with brownish red, and of superb flavor. Even the outer leaves are crisp and tender. Extremely hardy. Very fine for home use but too tender to ship any great distance. 45 days.

Salad Bowl. Large medium green, slow bolting, non heading. Differing in appearance from all other varieties in that the leaves are deeply lobed giving the mature plant a resemblance to Endive. Very tender. 47 days.

Muskmelon

Culture—A rich, sandy soil and good seed are absolutely necessary for success in raising the best Muskmelons. The seed should not be planted until the ground has become dry and warm; plant in hills 6 feet apart each way; old, well-rotted manure should be thoroughly mixed with the soil in each hill and in liberal quantity. Put six to ten seeds in the hill and when danger from insects is past, leave three or four of the strongest plants only. Cultivate often and not deep.

One ounce plants 60 hills, 2 to 3 pounds to an acre.

Green Fleshed Varieties

Honey Dew. Sweet as honey. Averages 6 inches in diameter and weighs 5 to 6 lbs. A late variety and should be started inside in pots or baskets. 100 days.

Ohio Sugar. A green-fleshed Tip-Top. One of the sweetest and most luscious. Round, inclined to oval in shape, heavy in proportion to size because the flesh is deep. The gray-green skin is distinctly ribbed and well netted. Because of its firm flesh, it is a good shipper to nearby markets. The flesh is of exquisite texture, sugary, juicy, tender, and entirely free from stringiness. 80 days.

Rocky Ford. Earliest, high quality, green fleshed variety. Rather small, almost round, slightly ribbed and densely netted. 75 days.

Salmon Fleshed Varieties

Banana. A delicious melon shaped like a huge banana. A late maturing variety, but a vigorous grower. Flesh slightly pink with a suspicion of banana flavor. 90-92 days.

Delicious No. 51. A new introduction in the Delicious class bred to incorporate Fusarium resistance. Compared to Iroquois types, Delicious 51 is earlier and is thicker fleshed, better color and firmer. 83 days.

Hale's Best No. 45. Mildew-resistant. New strain that resists mildew; heavily netted, therefore unsurpassed for shipping; oval shape, 6 by 5 inches with thick salmon flesh, small seed cavity. 75 days.

Muskmellon — Salmon Fleshed Varieties (continued)

Hearts of Gold. (Hoodoo.) A medium-sized, oval melon with flesh of exceptionally fine quality; well netted, desirable shipper. Vine is vigorous and quite blight-resistant. 73 days.

Honey Rock. Gold Medal, All-American Selections, 1933. A new, early productive variety. Almost round, being about 5 inches across by 6 inches long and very heavily netted. These features make it excellent for shipping. Skin is gray-green turning to golden yellow when ripe. Flesh is deep orange, thick and very sweet. Will command top market prices. 84 days.

Iroquois. A Delicious or Early Bender type, resistant to Fusarium Wilt. Fruits round to oval. Prominent ribs and coarse net; holds up well. Flesh deep orange, fine textured. 90 days.

Tip-Top. Introduced by us in 1892. Tip-Top in quality, appearance and productiveness; has held its own for many years against all introductions. Fruits are of large size, slightly oblong, moderately netted. Flesh bright salmon, sweet, juicy, firm and fine flavored. For close markets. 80 days.

Pride of Wisconsin. Recent introduction of merit. Similar to Queen of Colorado; slightly oval with heavy, coarse netting and faint ribs; thick salmon flesh, small seed cavity, extra high sugar content. 90 days.

Mustard

Culture—Sow seed $\frac{1}{2}$ inch deep about the middle of April, in rows 12 to 18 inches apart and when up, thin to stand 4 to 6 inches apart in the row. Successive sowing will give tender leaves throughout the season.

One ounce sows 100 feet of row, 3 pounds to an acre.

Fordhook Fancy or Ostrich Plume. A finely curled plume like mustard, slightly smaller and finer than Southern Giant curled. Of excellent eating quality. Slow to go to seed. 40 days.

Southern Giant Curled Long Standing. The most popular and best variety. Very high in quality and attractiveness. Plant large and upright, leaves large, long oval, crumpled and fringed on the margins. Bright medium light green in color. This variety has superseded the old standard Southern Giant Curled and Fordhook Fancy or Ostrich Plume. 40 days.

Tendergreen, or Spinach Mustard. Heavily productive variety for home or market garden, and for shipping. Large, thick, tender, dark green leaves, that are smooth, glossy and not lobed. Slow to go to seed. 45 days.

★ Denotes varieties suitable for freezing.

Okra (Gumbo)

Culture—Sow seed in May, after the ground is warm and dry, in drills 2 feet apart, covering $\frac{1}{2}$ inch and thin to stand 18 inches apart. Make early and late sowing for a continuous supply.

One ounce sows 100 feet of row, 6 pounds to an acre.

Dwarf Long-Pod. Early variety growing three feet high. Sets dark green, pointed long pods early and remain in good condition over a long period of time. 45 days.

Perkins Mammoth. 3-4 foot plants produce dark green 7-8 inch long pods; fleshy, tender, distinctly ribbed and tapered. 60 days.

Onion

Culture—Onion seed should be sown as early in April as it is possible to get the ground in shape, even though the weather is cold. Thorough preparation of the soil is one of the most essential points in successful onion-growing. They delight in a rich, deep, sandy loam, but excellent yields can be obtained from heavier soils properly fertilized. Sow the seed in rows 12 to 15 inches apart and about $\frac{1}{2}$ inch deep. After they are well started, or about 3 to 4 inches high, thin out to stand about 2 inches apart, keeping them well hoed and free from weeds at all times throughout the season.

One ounce will sow 100 feet of row, 4 pounds to an acre.

Yellow Varieties

Southport Yellow Globe. A standard main crop variety, deep globe shape, excellent color. Stores and ships well. 110 days.

Yellow Sweet Spanish. (Utah.) An improvement over the Riverside strain. Widely used in commercial Sweet-Spanish producing areas. 112 days.

White Varieties

Southport White Globe. Perfectly globe-shaped, uniform in size with good-keeping qualities. Bulbs medium large, flesh white, mild flavor. Best standard late variety. 110 days.

White Sweet Spanish. Selection from Riverside. Slightly flattened, used extensively for green bunching. 110 days.

Parsley

Culture—Sow seed in April, in rows 1 foot apart, covering $\frac{1}{4}$ inch. Thin to 3 to 6 inches apart. Succeeds best in rich, mellow soil. Taken up in the fall and placed in 6 inch pots and kept well watered, Parsley will produce an abundance of leaves all winter.

One ounce sows 150 feet of drill, 3 to 4 lbs. to an acre.

Parsley (continued)

Champion Moss Curled. Grows 8 inches high, leaves dark green and finely cut and curled. 70 days.

Hamburg (Rooted.) Parsley-like foliage with roots resembling slender parsnips. May be stored in winter. Roots used for flavoring. 100 days.

Parsnip

Culture—Sow seed in early April, as soon as the soil can be prepared, in drills 15 inches apart, and $\frac{1}{2}$ inch deep in well dug rich soil. Keep crust from forming and cultivate often. Thin to stand 4 inches apart. Roots improve by being left in ground until next spring.

One ounce sows 200 feet of drill, 5 to 6 lbs. to an acre.

Hollow Crown (Large Sugar.) Roots are white, smooth and of excellent flavor; 12-15 inches long. 3 inches wide at shoulder tapering to tip. 100 days.

Pumpkin

Culture—Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated in a similar manner. Sow in the month of May, when you plant your corn. Make hills the same as you do for squashes, but about 8 to 10 feet apart each way. Place about 8 seeds in a hill, cover 1 inch, and thin to 3 to 4 vines. It is preferable to grow Pumpkins in the field, and not in the gardens, as they mix with the squashes and other vines. You can sow some among the late corn, putting in a few seeds, say every third or fourth hill. This will give you plenty for the table, and your stock the coming winter.

One ounce of seed will plant 15 hills, 3 to 4 pounds will plant an acre.

Jack O'Lantern. Aptly named as the fruits are of excellent shapes for Halloween carving. Skin is bright orange, smooth and firm. Flesh is orange-yellow. 110 days.

Large Sweet. (Kentucky Field.) A large, round, flattened Pumpkin that is hardy and productive. It grows 1 to 2 feet in diameter and has thick orange flesh of extra-fine quality. A splendid sort for canning, family, and market use. 115 days.

Small Sweet. (Sugar.) This is the small, sweet Pumpkin that has made the New England States famous for their Pumpkin pies. The flesh is very fine grained, most deliciously sweet-flavored, and a splendid keeper. It averages about 10 inches in diameter and is of deep orange-yellow color. 105 days.

Striped Cushaw. Crookneck sort, mottled green and white striped. Flesh yellow, solid, fine-grained and very sweet. 75 days.

★ Denotes varieties suitable for freezing.

Peas

Culture—Peas thrive best in a rich soil and moderate temperature. Smooth seeded varieties are extremely hardy and can be planted quite early about 2 to 3 inches deep. Wrinkled varieties are not so hardy but are of superior quality. They should be planted when the ground is warm and dry and if they are planted quite early they should be covered only 1 inch to prevent rotting in the ground.

For dwarf varieties make the rows 20 to 30 inches apart and for tall varieties make them 30 to 36 inches apart. The seed should be placed 1 to 2 inches apart in the row. In the home garden, double rows, 6 inches apart, with brush or trellis between is ideal for conservation of space. Cultivate often and gather the crop as rapidly as it is fit for use. Successive sowings will provide food over a longer period.

Two pounds sow 100 feet of row, 75 to 100 lbs. sow an acre.

★ **Alderman.** (Tall Telephone.) A late wrinkled variety bearing freely large pods of a dark green color, and on this account considered by many superior to Telephone. Quality extra fine. 4 feet tall. 72 days.

American Wonder. (Nott's Excelsior.) Esteemed for earliness, productiveness, and quality. It grows about 10 inches high, and produces pods about 2½ inches long which are filled with fine-flavored peas. 60 days.

Blue Bantam. (See Hundredfold.)

Dwarf Telephone. Excellent for home gardens, truckers and shippers. Plant light green. From 8 to 10 peas of finest quality in pods. Vines approximately 20 inches high. 70-72 days.

Early Bird. (Laxton's Superb.) The earliest large podded dwarf sort, extremely hardy and productive. Vines grow 18 inches high and produce dark green, 4 inch pods with 9 to 10 large peas. Popular with market growers. 60 days.

Extra-Early Alaska. Earliest grown — good canner, maturing all about the same time. 5 to 6 blue-green smooth peas that retain their color after cooking. 30 inches tall. Can be planted earlier than the wrinkled sorts. 57 days.

★ **Hundredfold** (Laxtonian Blue Bantam.) Resembles Laxton's Progress but is a few days later and has taller vines. Vines 18 to 20 inches tall, uniform dark green and productive. Pods 4¼ to 4½ inches long, broad, curved, pointed, dark green and usually contains 7 to 8 large peas of excellent quality. 62 days.

★ **Laxton's Progress No. 9.** Earliest of the large-podded dwarf varieties. Very productive. Pods are 4 to 4½ inches long, pointed, deep green in color and contain eight large peas of delicious, sweet flavor. 15 to 18 inches tall. 62 days.

Little Marvel. This Pea has been rightly named. It is an early wrinkled sort, grows about 12 to 15 inches tall, and bears heavily, and the quality satisfies everybody. Adapted to home-gardens. Pods dark green, 3 inches long, round with square end, and often contain seven rich, dark green Peas. Little Marvel outsells all other varieties in its class. 62 days.

Peas (continued)

Nott's Excelsior. (See American Wonder.)

Telephone. (See Alderman.)

★ **Thomas Laxton.** One of the most popular. Yields heavy. Large 4 inch, square ended, well-filled pods. Unsurpassed for quality. 3 feet tall. 60 days.

★ **Wando.** (Hot Weather Pea.) 66 days. July 1st growing will still give you a nice harvest 65-68 days later. Vine is 24 to 28 inches long, dark green and prolific. Pods are 3½ inches long, dark green, straight, blunt, well-filled. Wrinkled seed. Good freezer.

Black Eye Peas. (Large Type.) Grown for summer use green and winter use dry. A main crop sort which is very productive. Dry seed white with black eye. 95 days.

Peas — Edible Pod

Dwarf Grey Sugar. Vine 24 to 30 inches tall, hardy, slender, with purple blossoms. Pods 2½ to 3 inches long. 66 days.

Mammoth Melting Sugar. Vine 4½ feet, light green, very hardy. Pods 4 to 4½ inches long, in fine quality. 72 days.

Peanuts

Culture—Peanuts require rich, sandy soil. Plant when the soil is warm and dry, about the middle of May. Plant 2 to 3 inches deep, with the hulls on, in rows about 3 feet apart, and about 10 inches apart in the rows. When ripe dig up the vines and hang up to dry.

Improved Large Virginia. (Jumbo.) Very productive, extra large peanut with rich flavor. Vines spread 3½-4 feet. Vines may be used for fodder. 120 days.

Peppers

Culture—Peppers should be started in a hotbed or coldframe and transplanted about the end of May into a sunny corner of the garden, in rows about 2 feet apart, with the plants about the same distance between them in the rows. They can be sown ½ inch deep in open ground in a seed-bed when all danger from frost has passed and the weather has become settled and the soil warm. When the little plants are about 3 inches in height, transplant as above into the rows where they are to remain. Some very rich fertilizer, stirred into the soil when the plants are about 6 inches high, will be found very beneficial. Maturities given are from transplanting dates.

One ounce of seed will produce about 1500 plants, 5 to 6 ounces to an acre.

★ Denotes varieties suitable for freezing.

Peppers (continued)

California Wonder. One of the most important market varieties. Large size having wonderfully thick flesh—often $\frac{1}{4}$ to $\frac{3}{8}$ inch thick which is deliciously crisp, tender, and sweet, like the finest pimientos. In color it is a brilliant dark green, changing to crimson when ripe, and is of uniform shape and smoothness. Should be grown on heavy soil for best results. 75 days.

Calwonder. Large, heavy, thick fleshed variety of the California type, being somewhat larger. Very sweet, uniform and smooth; a heavy cropper for such a large variety. A week earlier than California Wonder. 75 days.

Large Bell or Bullnose. (See World Beater.)

Pimiento. (Perfection.) Improvement on the older type tomato-shaped. Brilliant red; thick, sweet flesh, early and productive. The best of this type. 53 days.

World Beater. Fruit 5 inches long; $3\frac{1}{2}$ inches in diameter. Flesh thick and sweet. Standard early shipping variety. 70 days.

Yolo Wonder. A mosaic resistant type originated in California. More foliage than regular California Wonder. Leaves slightly larger, fruits are blocky and shorter, often infolded at nose. Color slightly lighter than California Wonder and a week or more later. 75 days.

Hot Varieties

Hungarian Long Slim. (Hot.) A waxy canary yellow in color, turning to crimson at maturity. 5 to 6 inches long, rather slender, tapering to a somewhat twisted point. Very prolific and pungent. 53 days.

Long Red Cayenne. 3 to 4 inches long, quite narrowed and hot. 50 days.

Radish

Culture—All varieties thrive best in light, sandy loam. For early use, sow in the hotbed in February, giving plenty of ventilation, or outside in the garden, in drills 1 foot apart as soon as the soil is warm and dry. Cover seed $\frac{1}{2}$ inch deep. Sow every two weeks from March until September for a succession of crisp Radishes for table use. Radishes must grow rapidly to be crisp, mild-flavored, and tender. We offer a very fine assortment.

One ounce of seed will sow 100 feet of drill, 8 to 10 pounds will plant an acre.

Round or Oval Varieties

Cherry Belle. All American Bronze Medal Winner in 1949. Round and red as a cherry. Slow to turn pithy. Short tops, and thrives in any garden soil. 25 days.

Radish — Round or Oval Varieties (continued)

Crimson Giant. Medium small tops. Largest of the early turnip rooted sorts. Fine for home or market. 25 days.

Early Scarlet Globe. Most popular globe-shaped early variety grown. Used more than any other by market gardeners for both forcing and outside planting. Very uniform; bright red skin and pure white flesh; always crisp, tender and of delicious flavor. With due consideration to the gardeners' needs we give special attention to selection of our strains. 25 day maturity

Sparkler White Tip. (Scarlet Turnip White-tip.) Lower portion white, upper half bright scarlet; a splendid, crisp variety. Suitable for home or market. Tops small. Roots almost globe shaped. 27 days.

Long Varieties

French Breakfast. Oval scarlet sort, tipped with white; mild and tender. 25 days. For home or market, also suitable for forcing. Becomes pithy if not used when first ready.

Long Brightest Scarlet. A fine long, red, market and home garden sort. Very uniform in shape. Flesh is crisp and tender. 4½ to 5 inches long. Bright scarlet, white tap root. 26 days.

White Icicle. It grows 4 to 5 inches long, is slightly stump-rooted, and of transparent whiteness. Matures quickly. Most excellent flavor. A long-standing sort. 29 days.

Best Winter Radishes

Chinese Rose Winter. A very handsome and distinct bright rose variety, crisp and tender; cylindrical in shape, very smooth. Keeps through autumn and winter. 48 days.

Round Black Spanish Winter. Similar to Long Black Spanish, except in shape. 50 days.

White Chinese Winter or New Celestial. Large Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition a long time; mild in flavor; brittle and never woody. 48 days.

Rutabaga (Swedish or Russian Turnip)

Culture—Rutabagas are more especially adapted to northern sections. They require a longer season for maturing, hence should be sown earlier than turnips, or about June 15. Make rows 18 inches apart, cover seed 1 inch and thin to 6 inches in the row.

One ounce sows 100 ft. of row, two to four pounds plants an acre.

American Purple-Top. Heaviest cropping sort; globe shaped with a rich purple top and light yellow below; quality fine; very tender, and not stringy. Small neck, flesh firm. Valuable table variety. 90 days.

★ Denotes varieties suitable for freezing.

Salsify or Oyster Plant

Culture—Good substitute for oysters. Sow early, in rows 1½ feet apart, and cover firmly 1 inch deep; thin to 3 inches apart in the rows. Will stand winter weather.

One ounce of seed will sow 50 feet of drill, 8 lbs. will plant an acre.

Mammoth Sandwich Island. Very uniform, large and of mild flavor. Should not be used until after a hard frost. 140 days.

Sunflower

Mammoth Russian. Gigantic growth; heavy foliage, which is sometimes mixed with corn as ensilage; large flower heads, filled with seed. Use 10 to 12 pounds of seed to the acre.

Spinach

Culture—Will succeed in any ordinary soil, but rich soil promotes better growth and makes leaves more tender and succulent. Can be grown as a spring or summer crop, but seed will not germinate in extreme dry weather. Sow in April, in rows 12 to 15 inches apart, covering seed 1 inch deep, and thin to 2 to 3 inches apart. For fall crop sow about August first, and for wintering over, about September first, and cover lightly with straw or other litter at approach of cold weather.

One ounce of seed will sow 50 feet of drill, 12 to 15 pounds will plant an acre.

Bloomsdale Savoy Long-Standing. (Supersedes Summer Savoy.) A new strain of merit. Almost as early as the old-type but stands in marketable condition much longer. Deep green leaves, intensely crumpled and blistered. 45 days.

New Zealand. Cut-and-come-again variety. Branching plants; thick, succulent leaves. Thrives during hot weather and in any soil. 65 days.

★ **Virginia Blight-Resistant Savoy.** Fine for fall planting, about August 15, but tends to go to seed when grown as spring crop. Type, same as Bloomsdale but darker. 38 days.

Swiss Chard or Spinach Beet

Culture—A peculiar variety of Beet. The leaves only are used as greens and the leaf-stalks or midribs may be cooked like Asparagus. Sow seed 1 to 2 inches deep in April or May in drills 12 to 18 inches apart, and thin to 8 to 10 inches apart in the row.

One ounce sows 100 feet of row, 4 to 5 pounds to an acre.

Lucullus. Improved; heavy yielding. Creamy white curled leaves. Erect plant stems, round and finely ribbed, foliage dark green. 55 days.

Squash

Culture—Plant after weather has become fully settled and the ground is warm and dry, in hills 5 to 6 feet apart for bush varieties, and 6 to 8 feet apart for running varieties. Hills should be thoroughly manured. Slightly elevate the hills and place seven or eight seeds in each, finally leaving but three plants. Press the seeds down firmly before covering, and cover early planted ones 1 inch deep, and late ones 1½ inches.

One ounce plants 40 hills, 3 to 4 pounds to an acre.

Summer Varieties Fall and Winter Varieties

Early Prolific Straightneck. Award of Merit, A.A.S., 1938. Earlier and more productive than the standard strain. Somewhat smaller and less warted but much more uniform. Bright yellow; quite free from greenish colorings, 55 days.

Early White Bush. (Patty-Pan.) Flat saucer-shaped fruits; scalloped edges; 6 to 8 inches in diameter; ready for use very early. Should be used while young and tender for stewing or frying. 50 days.

Early Golden Summer Crookneck. The largest and considered best Crookneck variety. Dwarf, bushy habit; rich golden-yellow fruits, thickly warted. 58 days.

Butternut. 10 to 12 inches long and 4 to 5 inches in diameter. Yellow flesh makes excellent pies. Good keeper. 110 days.

Hubbard. (Green Improved.) Color dark green turning bronze at maturity. Flesh rich orange-yellow, fine-grained, sweet; long keeper. A standard winter squash for home, market or shipping. 100 days.

Improved Cushaw. (See Pumpkin.)

Table Queen. (Acorn.) 6 inches long by 4 inches wide, just right to serve one-half to a person. Dark green, except when over-ripe, when it changes to buff; flesh is orange color and fine-grained. 75 days.

Italian Summer Squash

Cocozelle. Oblong, 12 to 16 inches in length and 5 inches in diameter, slightly ribbed; color marbled yellow and dark green stripes. Best edible condition when 6 to 8 inches long. 60 days.

Dark Green Zucchini. Resembles above except rich dark green with no striping or mottling. 65 days.

★ Denotes varieties suitable for freezing.

Tomato

Culture—In this locality, for very early fruit, the seed should be sown in a hotbed about the first week in March, in drills 5 inches apart and $\frac{1}{2}$ inch deep. Later sowings may be made until the last of April. You can approximate your sowing date from this according to your location. (Sufficient plants for a small garden can be started by sowing a few seeds in a shallow box or flower-pot and placing in a sunny window in the house.) When the young plants are about 2 inches high, they should be set 4 to 5 inches apart in another hotbed or cold-frame, or transplanted into small pots, allowing a single plant to a pot. Expose to the air as much as possible to harden them for planting out. Water freely at the time of transplanting in the open ground and shelter from the sun a few days until the plants are thoroughly established. Cultivate as long as the vines will permit, but the last two or three workings of the soil should be very shallow. The use of fertilizer, high in potash, makes tomatoes more solid and tends to keep them from cracking.

Tomatoes grow splendidly trained to stakes or trellises. The fruits are of better quality and appearance and ripen earlier. This method is common with market gardeners and is practiced by private gardeners where neatness and conservation of space is desired. The usual method is to set one strong plant to a stake 5 to 7 feet high, tying the plant up with wool or other strong, soft twine, and pruning quite freely as the vine advances in growth. By this method plants may be set much closer than in the ordinary way.

One ounce produces 2000 plants, 4 ounces to an acre. Maturities given are from transplanting into the field to first ripe fruits.

Red Varieties

Bonny Best. (Supersedes John Baer.) Good red for greenhouses. Is of medium size, bright scarlet, always smooth, and of uniform size and shape. A splendid sort to follow Earliana in the open field. 57 days.

Break-O-Day. Wilt-resistant. Developed from Marglobe and Marvana, having their disease resistant qualities. Resembles Marglobe in shape and size, but not so productive. Has vines of open habit like Marvana. Fruits are solid, meaty and a beautiful scarlet color. Needs fertilizer high in potash. 58 days.

Earliana. Compact plants, with short, close-jointed branches, setting fruits very early. Fruits are bright red, of uniform medium size, fleshy, solid and smooth. Flavor more acid than later varieties. 55 days.

Marglobe. (Wilt and Nailhead Rust-resistant.) Has made wonderful record in sections where these diseases prevail. Produced by crossing Livingston's Globe with other varieties. Vigorous grower in greenhouse or field; very productive; bright red, large, almost round. 60 days.

Pritchard. (Scarlet Topper.) Wilt-resistant. A cross between Marglobe and Cooper's Special; inherits the good qualities of the well known Marglobe and its self-topping characteristics from Cooper's. Fruits are of medium size, solid, and slightly globular. The color is scarlet with dark red interior. Vines are short and branching, with fruit clusters of about 5 each. Good rich soil is recommended. 60 days.

Tomato — Red Varieties (continued)

Rutgers. Wilt-resistant, Globe type. Outstanding features are large size, solid structure, deep red color all over and high yield. Its habit of ripening from the inside out is an asset in the manufacture of juice, catsup, etc. Vines are strong and sturdy with ample foliage. Does best on light, sandy soil without too much nitrogen. A good home garden sort. 60 days.

Valiant. Extra early, extra large variety; solid, brilliant scarlet fruits of the globe type. Vines are rather open therefore should be grown on heavy, well fertilized soil to avoid danger of fruit sunburning. 57 days.

Yellow Varieties

Golden Ponderosa. Golden Ponderosa equals Ponderosa in size, shape, and quality, but it is a golden yellow in color. In other words it is, as the name indicates, a yellow-fleshed Ponderosa. 82 days.

Golden Jubilee. A delightful new bright orange tomato with perfectly smooth round fruit weighing about 6 ozs. each. The interior is of equally bright orange-yellow color. Juicy with few seeds and of a delightful sub-acid flavor. Awarded a Bronze Medal in the 1943 All-American Selection. 72 days.

Big Varieties

Crimson Cushion (Beefsteak). A red Ponderosa. It is an extremely large, bright red variety that ripens evenly and is of good quality. 84 days.

Italian Potato Leaf. A large, solid, non-acid pink potato leaf variety with few seeds. Suitable for road stand markets and home gardeners. Not a commercial variety. Retail plant growers should try it. 80 days.

Oxheart. Introduced by us in 1925. Attractive pink skinned variety; exceedingly smooth and tender and almost seedless, frequently weighing 2 lbs. Mild flavor, attractive Oxheart shape, large size and excellent table qualities. Rich soil adds greatly to its productiveness. 87 days.

Ponderosa. The pink fruits ripen late, are very solid, almost seedless, of good sub-acid flavor, and of immense size, frequently weighing more than two pounds. It is now producing a much smoother fruit than when first introduced. Splendid slicer. Late variety. 84 days.

Turnip

Culture—Turnips serve the double purpose of summer greens and useful roots. Early varieties should be planted as soon as the ground is dry in spring. Sowings of these and other late ones can be made as late as August. Early sowing should be in rows 12 to 15 inches apart, covering

Turnip (continued)

seed $\frac{1}{2}$ inch and thinning to 4 to 6 inches apart in the row. Cultivate often and thoroughly. Late sowing can be broadcast rather than sown in rows.

One ounce of seed will sow 100 feet of drill, one to two pounds will plant an acre.

Purple-Top Strap-Leaf. Comes next to Purple-Top Globe in popularity. An early variety, very extensively used for the table. Leaves are few and upright in growth. Roots flat, of medium size, purple or dark red above ground, white below; flesh white, fine-grained, and tender. 56 days.

Purple-Top White Globe. Most popular main crop Turnip. Roots are large, purple or dark red above ground, white below and when in best condition for the table, are about 3 inches in diameter. Flesh white, fine-grained and tender. Popular for market garden use. 56 days.

Seven Top. Tops are extensively used for greens. Roots inedible.

Watermelon

Culture—A light, sandy soil, with good exposure to the sun, is best for Watermelons. The ground should be prepared deeply, but receive shallow cultivation. Hoe often and very thoroughly about the hills. Plant 1 inch deep in hills 6 to 8 feet apart each way, with a shovelful of well-rotted manure mixed with the soil in each hill. Plant eight to ten seeds in each hill, and when danger from insects is past, thin out to three strong plants.

One ounce of seed will plant 20 to 30 hills, 4 to 6 lbs. will plant an acre.

Charleston Gray W.R. High resistant to wilt, excellent shipping and eating qualities, one of the best watermelons currently available. Medium large, long, weighing 25-35 lbs. Flesh bright red, firm fine textured. Rind very light green and very finely textured. 90 days.

Dixie Queen. A remarkable new melon destined to become a leader for home gardens, local market and shipping. One of the sweetest in cultivation. Round with light and dark green stripes; uniform in size and appearance; size medium to large. Thin, tough rind; flesh bright scarlet, solid, of fine texture. Fewer seeds than any other variety. Vines very vigorous and prolific. Small white seeded. 85 days.

Kleckley's Sweets. An improved strain of Kleckley's Sweets, being more full at either end. It is large, heavy, oblong and has an even dark green skin and rather thin rind. Flesh is bright scarlet, with solid heart. Home garden and local market variety. White seeded. 85 days.

Stone Mountain or Dixie Belle. Large, medium dark green, round melon of excellent quality. Flesh highly colored, very solid with few seeds. A tough rind makes it good for shipping. Being early it can be grown farther north than many others. White seeded. 85 days.

Watermelon (continued)

Sugar Baby. The best early watermelon. Easy to grow and delicious to eat. Fruit almost perfectly round, 7 to 9 inches in diameter. Crisp bright-red flesh and few dark brown seeds. Widely adapted over the country. 75 days.

Tom Watson. A long melon of attractive appearance, uniform in shape and quality. Weighs 35 to 40 pounds, and is about 24 inches long by 10 inches in diameter. The thin, tough rind stands shipping or hauling well. Brown seeded, mottled white. 90 days.

GARDEN NOTES

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VEGETABLE PLANTING TABLE

Cultural directions will be found
under each heading

Name of Vegetable	Time to Plant	Seeds or Plants for 100 foot Row	Dist. Apart in Row in Inches	Depth Planting in Inches	Rows Apart Hand Cultivation	Rows Apart Field Cultivation
Asparagus Seed	April 1 to 15	2 oz.		1 to 2	18 to 24	30 to 36
Asparagus Plants	April	75 plants	18	8	24 to 36	36 to 48
Bush Lima Beans	May 15 to June 20	1 pound	6-10	1	30	30 to 36
Pole Lima Beans	May 15 to June 30	½ pound	24-36	2	30 to 36	36 to 48
Bush Beans	May 10 to Aug. 5	1 pound	3-4	2	24 to 30	30 to 36
Pole or Corn Beans	May 15 to July 20	½ pound	18-24	2	30 to 36	30 to 36
Beets, Table	April to August	2 oz.	2-3	½	12 to 15	30 to 36
Beets, Stock	April to July	1 oz.	8-10	1 to 2	15 to 18	30 to 36
Broccoli	April to July	75 plants	18-30	½	30 to 48	30 to 48
Brussels Sprouts	April	100 plants	12-18	½	30	30 to 36
Early Cabbage Seed		¼ oz.		½	30	
Late Cabbage Seed	May 5 to June 1	¼ oz.		½		
Cabbage Plants	April 1 to July 20	75 to 80 plts.	14-18		30 to 36	30 to 36
Cauliflower	April to July	75 plants	18-24	½	30 to 36	30 to 36
Carrots	April to July	1 oz.	2-3	½	12 to 15	30 to 36
Celery Seed	April 1 to May 10	¼ oz.		1-8	12 to 30	36 to 42
Celery Plants	May to August	150 to 200	6-8		12 to 30	36 to 42
Celeriac	May to June	150 to 200	6-8	1-8	18	30 to 36
Corn, Sweet	May 10 to July 10	¼ lb.	14-36	1 to 2	30 to 36	36 to 42
Cucumbers	May 15 to July	½ oz.	48-72	½-1	48	48 to 72
Dandelion	April to August	1 oz.	4-8	½	15 to 18	30
Egg Plant	Plants May 20	50 plants	18-24	¼	30	36 to 42
Endive	April to Aug.	1 oz. seed	8-10	½	12 to 15	
Garlic Sets	April	3 pounds	4-6	1	12 to 18	
Kale	Apr., Aug., Sept.	1 oz.	2-4	½	15 to 18	30 to 36
Kohlrabi	April to July	½ oz.	6-8	½	15 to 18	30 to 36
Lettuce Seed, Loose	April to Sept.	½ oz.	2-4	¼	12 to 15	
Lettuce Seed, Head	April to Aug.	½ oz.	12-15	¼	12 to 15	
Leeks	April	1 oz.	6-10	½	15 to 18	30 to 36
Melon, Musk	May 15 to June 15	½ oz.	48-72	1 to 1½	48 to 72	48 to 72
Melion, Water	May 20 to June 1	1 oz.	72-90	1 to 2	72 to 90	72 to 90
Mustard	April to August	1 oz.	4-6	½	12 to 15	
Onion Seed, Sets	April to May	6 oz.		½ to 1	12 to 15	
Onion Seed, Large	Early as Possible	1 oz.	2-3	½ to 1	12 to 15	
Onion Sets	March to July	1 to 2 lbs.	2-3	1	12 to 15	
Winter Onions	Aug., Sept.	1 to 2 lbs.	3	2 to 4	18 to 24	30 to 36
Okra	May	1 oz.	18-24	½	24	30 to 36
Parsley	April, May	½ oz.	3-6	¼	12 to 15	30
Parsnips	March, April	½ oz.	5-12	½	12 to 15	30 to 36
Peas, Early	March, April	2 pounds	2	2 to 3	15 to 24	30 to 36
Peas, Late	April, May	2 pounds	2	2 to 3	15 to 36	30 to 36
Peppers	Plants May 20	50 plants	18-24	½	24 to 36	30 to 36
Potatoes, Irish	April to July	10 pounds	12-14	4	24 to 30	30 to 36
Potatoes, Sweet	May 15 to June	75-100 plts.	12		30	30 to 36
Pumpkins	May 20	1 oz., 15 h'ls	72-86	1	96	
Radish	April to Sept.	1 oz.	2-3	½	12 to 15	
Radish, for Winter	Aug., Sept.	1 oz.	2-6	1	12 to 15	30
Rutabaga	July, Aug.	1 oz.	3-6	1	12 to 15	30 to 36
Salsify	April	½ oz.	3-5	1	12 to 15	30 to 36
Spinach	Apr., Aug. & Sept.	2 oz.	2-3	1	12 to 15	
Swiss Chard	April to July	1 oz.	8-10	1 to 2	12 to 18	30 to 36
Squash, Bush	May 20	1 oz., 40 h'ls	48	1 to 2	48 to 72	48 to 72
Squash, Vining	May 20	1 oz., 40 h'ls	96	1 to 2	72 to 96	96
Tomato Seeds	May, June	1 pkt.		½		
Tomato Plants	May 10 to July 10	30 to 40	24-48		24 to 48	36 to 48
Turnips	Apr., Aug., Sept.	1 oz.	3-4	½	12 to 15	

